



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/757,478  | 01/15/2004  | Young Wook Lee       | LT-0049             | 4169             |
| 34610 7590 03/21/2008<br>KED & ASSOCIATES, LLP<br>P.O. Box 221200<br>Chantilly, VA 20153-1200 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| SHIBRU, HELEN   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2621  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 03/21/2008  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/757,478

**Applicant(s)**

LEE, YOUNG WOOK

**Examiner**

HELEN SHIBRU

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. The amendments, filed 12/12/2007, have been entered and made of record. Claims 1-23 are pending. In view of Applicant's amendment to the drawings and claim 14, the objection to the drawings and the rejection of claim 14 are hereby withdrawn.

***Response to Arguments***

2. Applicant's arguments with respect to claims 1-23 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7-10, 15-16, 18, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki et al (US PG PUB 2003/0108328 A1) in view of Tanikawa (US Pat. No. 6,515,950).

5. Regarding claim 1, Kawasaki discloses a method for displaying information of data, to be deleted, in a digital video recorder, comprising:  
reading management information of data to be deleted from a storage medium during a recording operation performed by the digital video recorder (see fig. 1A-C, fig. 2, paragraphs 0006, 0008, 0047 and 0066); and displaying the read management information (see figs. 3, 9, and paragraphs 0053-0055 and 0122).

Claim 1 differs from Kawasaki in that the claim further requires reading management information of data to be deleted during a data overwriting operation that occurs during a recording operation.

In the same field of endeavor Tanikawa discloses reading management information of data to be deleted from a storage medium during a data overwriting operation that occurs during a recording operation (see figure 8 and col. 11 line 9-col. 13 line 8). Therefore in light of the teaching in Tanikawa it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki by reading management information during overwriting operation in order to use the DVD repeatedly.

Regarding claim 2, Kawasaki discloses the read management information is displayed in the form of an on-screen display (OSD) image (see fig. 9, paragraph 0047 and claim 10).

Regarding claim 3, Kawasaki discloses the OSD image includes a recording date and time for a file of the data to be deleted in accordance with the data overwriting operation, and a mark identifying a position of the data to be deleted (see figs. 3-5 and 9, and paragraph 0118 and 0047).

Regarding claim 4, Kawasaki discloses the OSD image includes a mark identifying a position of video image data being currently recorded in the recording operation (see paragraph 0047).

Regarding claim 7, Kawasaki discloses the management information includes recording date information or recording time information of a file of the data to be deleted (see fig. 9 and paragraph 0118).

Regarding claims 8 and 10, Kawasaki discloses the management information is information of the data file recorded on the storage medium at a position spaced apart by a predetermined distance from a current recording position of the storage medium (see fig. 9, paragraphs 0008 and 0053-0055 where it shows that the user selects a file to be deleted and record another file on the deleted file position and the information is recorded in separate position. See also paragraph 0047 where it discloses the management information position in the media).

Regarding claim 9, Kawasaki discloses the predetermined distance is determined by at least one of a control signal, and a selection made by a user (see paragraphs 0051-0057).

Regarding claim 15, the limitation of claim 15 can be found in claim 1 above. Therefore claim 15 is analyzed and rejected for the same reasons as discussed in claim 1 above.

Claim 16 is rejected for the same reasons as discussed in claim 3 above.

Claim 18 is rejected for the same reasons as discussed in claims 2-3 above.

Regarding claim 21, Tanikawa discloses the reading means reads management information of a data file that is recorded on the storage medium of the digital video recorder at a position spaced apart from a current recording position of the storage medium by a predetermined distance or data amount (see figure 2 and rejection of claim 1 above).

Regarding claim 22, Kawasaki discloses an OSD image includes a mark identifying the position of the data file to be deleted and a mark identifying the position of the data currently being recorded on the storage medium (see figs. 3-5 and 9, and paragraph 0118 and 0047).

6. Claims 5-6 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kawasaki in view of Tanikawa and further in view of the present application related arts.

Regarding claim 5, although Kawasaki and Tanikawa disclose the limitation of claim 1, Kawasaki and Tanikawa fail to disclose the recording operation comprises:

processing a video image picked up by at least one monitoring camera; detecting a variation in the video image to determine whether a particular event has occurred; and recording data of the video image on the storage medium of the digital video recorder when the variation is detected.

In the same field of endeavor the present application related art discloses the recording operation comprises: processing a video image picked up by at least one monitoring camera (see fig. 1 monitoring cameras and paragraph 3 of the related art description); detecting a variation in the video image to determine whether a particular event has occurred (see paragraph 4 where it discloses detecting of video signal when an event, for e.g. third party invasion, occurred) and recording data of the video image on a main storage medium of the digital video recorder when the variation is detected (see paragraphs 4 and 5 and fig. 2). Therefore in light of the teaching in the related art it would have been obvious to one of ordinary skill at the time the invention was made to modify Kawasaki by detecting an event and recording the event on the main storage medium in order to save the data permanently.

Regarding claim 6, Kawasaki discloses the data overwriting operation is executed in a sequential manner, starting from a position at which the oldest one of the data recorded on the storage medium is recorded, and wherein the data overwriting operation is executed when there is substantially no spare space on the storage medium for additional recording data (see paragraphs 0118 and 0066).

7. Claims 11-14, 17, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki in view of Tanikawa and further in view of Cochran (US PG PUB 2004/0024838 A1).

Regarding claims 11 and 12, although Kawasaki and Tanikawa disclose all the limitations in claim 1, Kawasaki fails to disclose backing up the data to be deleted on a backup recording medium wherein the backup recording medium is external to the digital video recorder. In the same field of endeavor Cochran discloses a file is backed up to backup copies of the primary data on physically discrete mass storage devices or media (see paragraph 0010). Therefore in light of the teaching in Cochran it would have been obvious to one of ordinary skill in the art at the time the invention was made to back up a file in order to save the data permanently if the primary data is overwritten or deleted.

Regarding claim 13, Cochran discloses the data backup is executed for a subset of the data files to be deleted (see paragraph 0010 in the summary of the invention).

Regarding claim 14, Cochran discloses an on-screen display (OSD) image includes a backup option button for selecting a backup operation for the data file to be deleted (see paragraphs 0009 and 0039, see also claims 2-4 rejections above).

Claim 17 is rejected for the same reason as discussed in claim 11 above.

Regarding claim 23, Kawasaki discloses displaying means comprises an on-screen display (OSD) (see claim 2 above), and Cochran discloses an OSD image includes a back up option button for selecting a backup operation for the data file to be deleted (see paragraph 0039, the host computer connected to a local mass-storage device provide back-up function, it is inherent that the button is provided to select the option).

8. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki in view of Cochran, Tanikawa, and further in view of the present application related art.

Regarding claim 19, the limitation of claim 19 can be found in claims 1, 2, 5 and 11 above. Therefore claim 19 is analyzed and rejected for the same reasons as discussed in claims 1, 2, 5 and 11. It is noted that a method of operating a digital video recorder, comprising: recording current data from at least one of a plurality of sensors (see related art in the present application and rejection of claim 5); storing the current recorded data to a first location of a storage device of the digital video recorder (see related art and rejection of claim 5 above); reading management data of a file to be deleted from the storage device as part of a data overwrite operation (see claim 1 above); displaying the read management data to a user (see claim 1 above); and storing the file to be deleted to an additional storage device in a backup operation when so requested by the user (see claims 2 and 11-12 above). Therefore in light of the teaching in the related art and Cochran it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki in order to save the data permanently if the primary data is overwritten or deleted.

Claim 20 is rejected for the same reasons as discussed in claims 1, 8 and 11 above.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period



Art Unit: 2621

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/  
Examiner, Art Unit 2621  
March 14, 2008

/Thai Tran/  
Supervisory Patent Examiner, Art Unit 2621

